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|-----------------------|----|
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10/088,318

Examiner

Ricky D. Shafer

Applicant(s)/Patent under Reexamination

**MUNYARD ET AL** 

**Art Unit** 

2872

| √ | Rejected |
|---|----------|
|   | Allowed  |

| - | (Through numeral)<br>Cancelled |
|---|--------------------------------|
| ÷ | Restricted                     |

| N | Non-Elected  |
|---|--------------|
| _ | Interference |

| A | Appeal   |
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| 0 | Objected |

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| Cla  | im   |  | _  |  |                | ate  |              | _        |          | $\neg$   |
| <u>  "</u>   |  | Μ  |  |  | $\overline{}$  | - 410  | _            | $\neg$   | $\neg$   | $\dashv$ |
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| <u> </u>   | 9  | 11   | _  | _  | -              | _  | -            | -        |          |          |
| _چ_  | 0  |  |  | $\vdash$   | Н              | _  |              | _        | _        | _        |
| 6  | /  | 11   |  |  |                | _  |              |          | _        | _        |
|  | 8  | 11   |  |  | Ш              |  |              |          |          | _        |
|  | 8  |  |  |  |                |  |              |          |          |          |
| 8  | 10   | =  |  |  |                |  |              |          |          | ]        |
| 10   | 11   | 11 11  |  |  |                |  |              |          |          |          |
| 11   | 12   | 11   |  |  | П              |  |              |          |          |          |
| 12   | 13   | ᆿ  |  | П  | Н              |  |              |          |          | $\dashv$ |
| aˆ   | 14   | 11 11 11   | $\vdash$   | $\vdash$   | Н              | -  | _            | $\vdash$ | $\vdash$ | $\dashv$ |
| 12   | 15   | $\vdash$   | $\vdash$   | -  | -              |  |              | $\vdash$ |          | $\dashv$ |
| 8<br>10<br>11<br>12<br>9<br>13<br>14<br>15<br>17<br>18<br>19<br>16 | 10<br>11<br>12<br>13<br>14<br>15<br>(6)<br>17<br>(8)<br>21<br>22<br>23<br>24<br>25 | 1  | $\vdash$   |  | $\vdash$       | -  |              | Н        | $\vdash$ | $\dashv$ |
| 14   | 1150   | 11   | <u> </u>   |  | $\vdash$       | _  | <u> </u>     | Щ.       | Ш        | Ш        |
| 15   | 17   | 11 11 11   | _  | <u> </u>   | <u> </u>       |  | Щ            | Ш        | Ш        | Щ        |
| 17   | (8)  | u  |  |  |                |  |              |          |          |          |
| 18   | 19   | 11   |  |  |                |  |              |          |          |          |
| 19   | (20)   | 11   |  |  |                |  |              |          |          |          |
| 16   | 21   | = ==   |  |  |                |  |              |          |          |          |
|  | 28   |  |  |  |                |  |              | П        |          |          |
|  | 23   | _  | _  | _  | -              |  |              | _        |          |          |
| $\vdash$   | 24   | Н  | -  | H  |                |  |              |          | _        | Н        |
| <u> </u>   | 25   | -  | $\vdash$   | ┢  | -              |  |              | $\vdash$ | _        | $\vdash$ |
|  | 20   | H  | ⊢  | -  | -              | _  | $\vdash$     | -        |          | $\dashv$ |
|  | 26<br>27<br>28   |  | ⊢  | -  | H              |  | _            | H        |          | -        |
|  | 27   | $\vdash$   | <u> </u>   | <u> </u>   | lacksquare     | _  | _            | L        | _        |          |
|  | 28   | _  | <u> </u>   | _  | Ш              |  |              | ļ.,      |          | Ш        |
|  | 29<br>30   |  | L  |  | L              |  | L            | _        |          |          |
|  | 30_  |  |  |  |                |  |              |          |          |          |
|  | 31<br>32   |  |  | l  |                |  | L            |          |          |          |
|  | 32   |  |  |  |                |  |              |          |          |          |
|  | 33   | Г  | Т  | Г  |                | Г  |              | П        |          |          |
|  | 34   | $\vdash$   | <del>                                     </del> | $\vdash$   | $\vdash$       | $\vdash$   | $\vdash$     | П        | П        | П        |
| $\vdash$   | 34<br>35   | ┢  | ╁  | $\vdash$   | <del>  -</del> |  | $\vdash$     | $\vdash$ | $\vdash$ | Н        |
| $\vdash$   | 36   | $\vdash$   | $\vdash$   | ├  | -              | $\vdash$   | $\vdash$     | -        | -        | Н        |
| $\vdash$   | 36   | $\vdash$   | <del>                                     </del> | $\vdash$   | $\vdash$       | $\vdash$   | <del> </del> | H        | H        | Н        |
| <u> </u>   | 37   | <del> </del>                                     | -  | $\vdash$   | $\vdash$       | <del> </del>   | ├—           | $\vdash$ | Ш        | H        |
| <u> </u>   | 38   | $\vdash$   | _  | <u> </u>   | <b>—</b>       | <u> </u>   | ⊢            | $\vdash$ | L.       |          |
| <u></u>  | 39   | <u> </u>   | _  | <u> </u>   | L_             | L_   | L            |          | L        |          |
| L  | 40   | L  |  | 匚  | ot             | $ldsymbol{ld}}}}}}$ | $oxed{oxed}$ |          | Ш.       |          |
| L  | 41   |  |  |  |                |  |              |          |          |          |
|  | 42   |  |  |  |                |  |              |          |          |          |
|  | 43   | Γ  | П  |  | П              |  |              | Г        | Г        |          |
|  | 44   | <del>                                     </del> | $\vdash$   | <del>                                     </del> | Ι-             | $\vdash$   | _            | T        | H        | П        |
| _  | 45   | _  | $\vdash$   | $\vdash$   | $\vdash$       | -  | $\vdash$     | $\vdash$ | $\vdash$ |          |
| -  | 46   | $\vdash$   | $\vdash$   |  | $\vdash$       | $\vdash$   | $\vdash$     | -        | $\vdash$ | -        |
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|  | 47   | <u> </u>   | <u> </u>   | <u> </u>   | <u> </u>       | <b>—</b>   | <u> </u>     | <b>!</b> | $\vdash$ | _        |
|  | 48   | L  | _  | _  | L_             | <u> </u>   | <u> </u>     | <u> </u> | <u> </u> | _        |
|  | 49   | L  | $oxed{oxed}$                                     | _  | L              | L  |              | <u> </u> | L        | L        |
| 1  |  |  |  |  |                |  |              |          |          |          |

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| 1        | <u> </u>   | Original |  |  |  |  |          |          |          |          |          |
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|          |  | 51       |  | Г  | _  |  |          |          |          |          | $\dashv$ |
|          | -  | 51<br>52 |  |  |  |  |          |          |          |          | $\neg$   |
|          |  | 53       | _  | -  |  |  |          |          |          |          | $\dashv$ |
|          |  | 54       |  | $\vdash$   | -  | -  | _        |          |          |          | $\dashv$ |
|          | -  | 54<br>55 |  |  |  |  |          | =        | Н        |          | $\dashv$ |
| _        | -  | 56       |  |  |  |  |          |          | $\vdash$ |          | $\dashv$ |
| $\dashv$ | -  | 57       |  |  |  |  | _        |          | Н        |          | $\dashv$ |
| 一        | -  | 58       | -  | -  |  |  |          | _        |          |          | 一        |
| $\dashv$ | -  | 59       | -  | -  |  |  | -        | -        |          |          | $\dashv$ |
| 一        |  | 60       | _  |  |  | _  |          |          | $\dashv$ | $\dashv$ | $\dashv$ |
| $\dashv$ |  | 60<br>61 |  | ┝  |  |  |          |          |          | $\dashv$ | $\dashv$ |
| ᅴ        | <del> </del>                                     | 62       |  | $\vdash$   |  | $\vdash$   | -        | $\vdash$ |          |          | $\dashv$ |
| $\dashv$ |  | 63       | $\vdash$   | $\vdash$   | $\vdash$   | -  |          | $\vdash$ | -        | $\dashv$ | $\dashv$ |
| $\dashv$ | <b>—</b>   | 64       | $\vdash$   | -  | -  | -  |          |          | -        | $\vdash$ | $\dashv$ |
| $\dashv$ | <u> </u>   | 65       | <del> </del>                                     | -  | $\vdash$   |  | $\vdash$ | -        |          | $\vdash$ | Н        |
| $\dashv$ | <u> </u>   | 66       |  | $\vdash$   | $\vdash$   | $\vdash$   | -        |          | $\vdash$ | -        | $\vdash$ |
| $\dashv$ | <del>                                     </del> | 67       |  | H  | H  | -  |          |          | _        |          | Н        |
| $\dashv$ | <del> </del>                                     | 68       |  | ⊢  |  | -  | _        |          | -        |          |          |
| $\dashv$ | <del>                                   </del>   | 69       | -  | $\vdash$   | _  | -  | _        |          | -        | $\vdash$ | Н        |
| $\dashv$ | <b>-</b>   | 70       |  | -  |  |  | -        | -        |          | $\vdash$ | _        |
| -        |  | 71       | ├  | $\vdash$   | $\vdash$   | $\vdash$   | _        | $\vdash$ | -        | -        | -        |
| $\dashv$ | <del>                                     </del> | 72       | <del> </del>                                     | ₩  |  |  | _        | _        | $\vdash$ | -        | Н        |
| ᅥ        | <del> </del>                                     | 73       | $\vdash$   | H  | -  | -  | $\vdash$ |          | -        | Н        | _        |
| $\dashv$ | -  | 73<br>74 | ┢  | -  | $\vdash$   | <del> </del>                                     | -        | _        | _        | -        |          |
| $\dashv$ | <del> </del>                                     | 75       | ┢  | ┢  | $\vdash$   | -  | H        |          | _        | _        | _        |
| ᅥ        | <u> </u>   | 76       | $\vdash$   | H  | -  | $\vdash$   | $\vdash$ |          |          |          |          |
| $\dashv$ | · -  | 76<br>77 | $\vdash$   | ╁╌   |  | <del>                                     </del> | -        |          |          |          | _        |
|          | <del> </del>                                     | 78       | <u> </u>   | -  |  | <u> </u>   | ┢═       | $\vdash$ | $\vdash$ | $\vdash$ |          |
| $\dashv$ | <u> </u>   | 79       |  | $\vdash$   |  | ┢╾   | ┢        | ┢        | -        |          |          |
| ┪        | -  | 80       |  | 一  |  | -  |          | -        | $\vdash$ | Н        |          |
| -        |  | 81       |  | H  | $\vdash$   | -  | Н        | ┢        | $\vdash$ | Н        |          |
| _        |  | 82       | $\vdash$   | <del>                                     </del> | ✝  |  | $\vdash$ | <u> </u> | Т        |          |          |
| $\dashv$ |  | 83       |  | $\vdash$   | $\vdash$   | $\vdash$   | $\vdash$ | Т        | $\vdash$ | $\vdash$ | $\vdash$ |
| $\dashv$ |  | 84       | ╁─╴  | T  | $\vdash$   | <del>                                     </del> | $\vdash$ | $\vdash$ | $\vdash$ | Т        | $\vdash$ |
| $\dashv$ |  | 85       | T  | T  | T  |  |          | $\vdash$ | T        |          |          |
| 一        |  | 86       | T  | 1  | i –  | 一  | $\vdash$ | $\vdash$ | $\vdash$ |          | $\vdash$ |
| $\dashv$ |  | 87       | $\vdash$   | $\vdash$   | $\vdash$   | $t^-$  | t        | T        | T        | $\vdash$ |          |
| -        |  | 88       | Т  | T  | <del>                                     </del> | T  |          | Г        | T        | Г        | $\Box$   |
|          |  | 89       |  | ⇈  | Г  | Г  | <u> </u> |          |          |          | П        |
| $\neg$   |  | 90       |  | T  |  | 1  | T        | T -      |          |          | Г        |
| ٦        |  | 91       | <del>                                     </del> | T  | П  | <del>                                     </del> | T        | T        | T        |          | Т        |
| _        |  | 92       | Г  | Τ  |  |  |          | T        |          |          |          |
|          |  | 93       | <del>                                     </del> | П  | Г  | Г  | Γ        | Γ        |          | Г        | П        |
|          |  | 94       | Г  |  |  | Г  |          |          |          |          |          |
|          |  | 95       |  | 1  | T  | Ι_   | T        |          | Г        | Г        | Г        |
|          |  | 96       |  | Τ  | Г  |  | Ι        |          | Π        | Г        |          |
|          |  | 97       | $\vdash$   |  | Г  | _  | Π        |          | Г        |          |          |
|          |  | 98       | T  |  |  |  |          | ┌╴       | Г        | Г        | Г        |
|          |  | 99       | 1  | T  |  | Γ  |          |          | Г        | Γ        | Г        |
| _        |  | 100      | Π  | Π  |  |  | Г        | Γ        | Г        |          |          |
|          |  |          | -  | ٠  |  |  | -        | _        |          |          |          |

| Claim     |   | Date     |   |          |          |  |          |          |              |                                     |  |
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| ш         | ŏ   | i        |   |          |          |  |          |          |              |                                     |  |
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|           | 101   |          |   |          |          |  |          |          |              |                                     |  |
|           | 102   |          |   |          |          |  |          |          |              |                                     |  |
|           | 102<br>103  |          |   |          |          |  |          |          |              |                                     |  |
|           | 104   |          |   |          |          |  |          |          |              |                                     |  |
|           | 105<br>106<br>107   |          | _   |          | _        |  |          | _        |              | $\neg$                              |  |
|           | 106   |          |   | -        | _        |  |          |          | Н            | $\dashv$                            |  |
|           | 100   | _        | _   | H        | -        | Н                                      | -        |          |              | $\dashv$                            |  |
|           | 107   |          | _   |          |          | $\vdash$                               | _        | _        |              | $\dashv$                            |  |
|           | 108   |          | _   | _        | Щ        |  | _        | _        |              | Ш                                   |  |
|           | 109   |          |   |          |          |  |          |          |              | $\Box$                              |  |
|           | 108<br>109<br>110   |          |   |          |          |  |          |          |              |                                     |  |
|           | 1111  |          |   |          |          |  |          |          |              | $\Box$                              |  |
|           | 112   |          |   | Γ        |          |  |          |          |              |                                     |  |
|           | 113   | М        |   | Т        |          | $\vdash$                               | _        | $\vdash$ | П            | $\dashv$                            |  |
|           | 112<br>113<br>114<br>115  | -        | <del>                                     </del>  | H        | $\vdash$ | $\vdash$                               | $\vdash$ | $\vdash$ | $\vdash$     | $\vdash$                            |  |
|           | 115   | $\vdash$ |   | $\vdash$ | -        | $\vdash$                               | $\vdash$ | $\vdash$ | -            | $\dashv$                            |  |
|           | 113   |          |   |          | _        |  | ┝        | ├-       | $\vdash$     | $\vdash$                            |  |
|           | 116   | <u> </u> | <u> </u>  | -        | <u> </u> | _                                      |          | _        |              |                                     |  |
|           | 117   | L_       |   | _        | L        | L                                      |          |          |              | Ш                                   |  |
|           | 118   |          | <u> </u>  |          | L        |  |          | L        |              |                                     |  |
|           | 119   |          |   |          |          |  |          |          |              |                                     |  |
|           | 120   |          |   |          |          |  |          |          |              |                                     |  |
|           | 121   |          |   | T        | Г        | Г                                      |          |          |              |                                     |  |
|           | 122   | ┢        | -   | $\vdash$ | $\vdash$ | $\vdash$                               | $\vdash$ | $\vdash$ |              |                                     |  |
|           | 123   |          | ┢   | H        | -        | 1                                      | -        | -        | H            |                                     |  |
|           | 123   | ⊢        | ┝   | ┢        | $\vdash$ | -                                      | -        | $\vdash$ | -            | Н                                   |  |
|           | 124   | -        | <u> </u>  | ┢        | ├-       | ⊢                                      | <u> </u> | ⊢        | -            | Н                                   |  |
|           | 125   |          | L   | ├-       | <u> </u> | _                                      |          | ⊢        | ⊢            | Ш                                   |  |
|           | 126   | <u> </u> | _   | ╙        | <u> </u> | _                                      | <u> </u> | L        | <u> </u>     | Щ                                   |  |
|           | 127   |          | L   | _        |          | _                                      |          | _        | _            | Ш                                   |  |
|           | 116<br>117<br>118<br>119<br>120<br>121<br>122<br>123<br>124<br>125<br>126<br>127<br>128<br>129<br>130 |          |   |          |          |  |          | <u> </u> |              | Ш                                   |  |
|           | 129   |          |   | Г        | [        |  |          |          |              |                                     |  |
|           | 130   |          |   | 1        |          |  |          |          |              |                                     |  |
|           | 131   |          | ┢   | 1        |          | T                                      |          | $\vdash$ | ┪            | П                                   |  |
| $\vdash$  | 132<br>133  | -        | $\vdash$  | $\vdash$ | $\vdash$ | ┪                                      | ┢        | $\vdash$ | $\vdash$     | Н                                   |  |
| ├─        | 132   | -        | $\vdash$  | ┝        | ├        | ┢                                      | ┝        | ┝        | ┢            | Н                                   |  |
|           | 133   | ₩        | ⊢   | ├        | -        | ⊢                                      | ⊢        |          | ⊢            | Н                                   |  |
| <u> </u>  | 134   | ├        | -   | ⊢        | ⊢        | ⊢                                      | <u> </u> | ┝        |              | Н                                   |  |
|           | 135   |          | _   | ┢        | <u> </u> | <u> </u>                               | <u> </u> | ⊢        | <u> </u>     | Н                                   |  |
|           | 135<br>136<br>137<br>138<br>139   | <u> </u> | <u> </u>  | $\vdash$ | $\vdash$ | _                                      | _        | <u> </u> | <u> </u>     | Щ                                   |  |
|           | 137   | _        | L   |          | _        | _                                      | L        |          | <u> </u>     |                                     |  |
|           | 138   | L        | L   | L        | L        | L                                      | L        | L        | L            | $oxed{oxed}$                        |  |
|           | 139   |          |   |          | Γ        | Γ                                      | 1        | _        |              |                                     |  |
|           | 140   | П        | Π   |          | П        | Π                                      |          |          |              | П                                   |  |
|           | 141   | Г        | Г   |          | Г        | Г                                      | Г        | Г        | П            | П                                   |  |
| <u> </u>  | 142   | $\vdash$ | <del>                                     </del>  | t        | H        | 1                                      | $\vdash$ | t –      | 1            | Н                                   |  |
| <b></b> - | 143   | -        | $\vdash$  | H        | $\vdash$ | $\vdash$                               | $\vdash$ | $\vdash$ | $\vdash$     | Н                                   |  |
| <u> </u>  |   | $\vdash$ | ├   | ╁        | ⊢        | ├                                      | ⊢        | ╁        | ⊢−           | H                                   |  |
| <u> </u>  | 144   | $\vdash$ | $\vdash$  | ₽        | <u> </u> | ├-                                     | ⊢        | ⊢        | ⊢-           | $\vdash$                            |  |
| L         | 145   | <u> </u> | <u> </u>  | $\perp$  | ╙        | $oldsymbol{oldsymbol{oldsymbol{eta}}}$ | <u> </u> | _        | Щ            | Щ                                   |  |
| <u> </u>  | 146   | L        | L   | L        | L        | L                                      | L        | L        | L            |                                     |  |
|           | 147   |          |   |          |          |  |          | 1        |              |                                     |  |
|           | 148   |          | Π   | 1        | Π        | Π                                      | Г        | T        | Ī            | Π                                   |  |
| ┢╌╴       | 149   | t        | ⇈   | †        | $\vdash$ | 1                                      | T        | T        | t            | $\vdash$                            |  |
| $\vdash$  | 150   | $\vdash$ | +-  | +-       | $\vdash$ | $\vdash$                               | +        | +-       | <del> </del> | Н                                   |  |
|           | 100   | L        | $oldsymbol{ol}}}}}}}}}}}}}}}}}$ | 1        | L        | Ш.                                     | 1        |          | <u> </u>     | $ldsymbol{ldsymbol{ldsymbol{eta}}}$ |  |